THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

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American Farmer Establishment.

BALTIMORE: TUESDAY, NOV. 22, 1836.

The article in this day's paper on the subject of vegetable philosophy is well written, full of instruction, and will command intense interest from all lovers of agricultural science.

A lady clothed in American silk—At the Agricultural Exhibition of Merrimack county, Mas. Mrs. Kimball of Hopkinton, N. H. was present, robed in rich and durable silks of her own manufacture. She raised the silk worms, reeled, twisted, dyed and wove the silk, and for aught that is known to the contrary, made the garments with her own hands.—*Northern paper.*

Would it not be well to try the experiment in our county. The trouble and expense, even should the experiment fail, will be of but little consequence, compared with the immense advantages, should it succeed; and we cannot permit ourselves to doubt its success if once entered into with spirit. We would consider the person a public benefactor who produces the first skein of *silk*, or the first pound of *beet sugar* in our county.—*Winchester (Va.) Republican.*

We published a few weeks since the first of the above paragraphs, and re-insert it with the view of making some brief remarks upon the excellent suggestion of the editor of the *Winchester Republican*. He asks, "would it not be well to try the experiment in our county?" We reply certainly it would not only be well, but that the *trial* would result in the conviction of its utility, as well as surprise that a people so enlightened and patriotic as those of Virginia, should have remained so long insensible to the advantages to enure to them from embarking in a branch of agricultural industry so happily adapted to their soil and climate. Possessing as they do, in an eminent degree, all the favored elements for the culture of the Mulberry, which is indigenous to nearly every portion of the state, the wonder is,—that they should have permitted their eastern brethren,—who, say what you may about their tact, industry and enterprise, live under the influence of a clime not half so well suited to the raising of silk as is that of the *Old Dominion*,—to outstrip them in a culture at once so full of interest, and offering so many inducements in the way of profit. If the *silk business* in America was a visionary scheme of some moon-struck theorist—if its practicability had not been demonstrated with mathematical certainty—if its great lucrativeness had not been fully proved by the experiments and practice of hundreds, there might be an apology found for the apathy which prevails—but when there are so many examples of brilliant success to refer to—when we find our calculating brethren of the east—who, to use a Yankee comparison—know the value of a dollar as well as any one else,—bending their energies unceasingly towards it, those who live in a more propitious climate should certainly *follow*, if they will not lead in a business so replete with hope and so encouraging upon the score of profit. To the lower section of Virginia, where her soil has been robbed of its virgin excellence by a long series of killing-cropping, the silk culture would come like a healing balsom; for it would place an acre of the poorest land upon a footing of more than equality with the richest and most fertile land in the great valley of the Mississippi, as it is a well established fact, that *poor sands and gravels* make the best silks.

Before we close these remarks it may be opportune to annex the following highly judicious remarks upon the present aspect of the silk culture in the United States.

"The silk culture in our country may no longer be regarded as the pastime of ladies, who, having nothing else to do, have employed their time in raising silk worms, and in winding and reeling the products of their industry. The preparation of this valuable article is becoming rapidly a regular branch of manufacture, employing large capital and returning to those who have embarked in it, a handsome profit for their money and labor. There is at Dedham, Massachusetts, that land of enterprise and industry, a factory which drives sixteen hundred spindles and employs one hundred females, who turn out two thousand dollars worth of silk every week. With a climate adapted to the growth of the food for this valuable *operative*, and well suited for its existence, we can see no good reason why our country should remain tributary to other nations for this beautiful and useful product. Millions have gone, year after year, to pay for the stuffs fabricated by foreign industry, which might have been kept at home to great advantage, and we hope that the day is not far distant when Americans will no longer expend their money in supporting the laborers of other countries. Silk, in its raw as well as prepared state, may soon be sent abroad as one of the staple commodities of our commerce, and so far from being a drain upon our wealth, will be a powerful mean of increasing it. Why may we not become in the course of a few years what the French and Italians are at present, and our silks be as celebrated for their lustre and beauty as those of France and Italy."—*Baltimore American, Nov. 14.*

NORTHERN CORN—ARTICHOKES.

Extract from a letter to the editor of the Farmer and Gardener, dated

"LOUDOUN CO., Va. Oct. 29, 1836.

"During a short visit to the east in the summer of 1834, I procured a few ears of Northern corn, which in the spring of 1835, I planted in a rich bottom in drills of 4 feet, the plants 12 inches apart. The corn is of a deep yellow kind, ears thin and long. I do not now recollect its product, or whether I made any estimate of it at the time; but I know from recollection that I was pleased with it as well on account of its early maturity, as of its yield; and my object in noticing it now is to say that I think in all *late springs*, it would be the interest of our farmers south of the Delaware to plant this or some other eastern corn of equal character for early maturing. As well as I can charge my recollection with the fact at this date, I think the small patch I made was fit for grinding in somewhat like an hundred days. Now as there has been a great scarcity of other grain crops, would it not be well for planters and farmers generally to put in a portion of their next year's crop of some early kind? I am apprehensive that it would, and thus early beg leave through your paper to call the attention of my brother Southrons to the subject."

* * * * *

"By the way, while I am writing, it strikes me that it would be worth an experiment for the agriculturists of the south to plant in some of their least valuable fields the Artichoke, to turn their hogs into previous to putting them up for fattening. This root, it is known, will grow in shady situations, and in very poor ground, and yield well, and it is equally well known that the hogs take great delight in rooting them up and consuming them."

[*Note by the Editor of the Farmer & Gardener.*

We like both suggestions of our correspondent, but with respect to that relative to Arti-

chokes, we think that any farmer having from 30 to 50 head of hogs would find his interest promoted by planting 2 or 3 acres in potatoes, carrots, parsnips and ruta baga. Either of these quantities of land thus appropriated would yield roots enough to render all *corn-feeding* unnecessary, except so much as might be requisite to *harden* the flesh of his hogs, say 2 bushels to each hog.]

GREAT SALE OF SHORT-HORN DURHAMS.

We record below the *account sales* of the stock of the above breed of cattle imported by "*The Ohio Company for importing English cattle*," which took place at Indian Creek farm, the residence of the Company's agent, in Ross county, Ohio, on the 29th of last month. The prices at which this fine herd of cattle sold, will appear high to those who have been in the habit of estimating the value of cattle at the old standard of native breeds; but those who may be conversant with the estimable qualities of the improved Short-horn Durhams, will know too well how to appreciate them to be surprised at the prices the present lot brought. The western country are now in possession of as fine a stock of neat cattle, the numbers being considered, as are possessed by any other portion of the world. Those which have just been disposed of by this enterprising company, were selected in England from the finest herds, by competent judges, and doubtless comprised the best animals that could be procured in the British empire. We congratulate the generous and patriotic people of the great west upon this solid acquisition to their theretofore noble stock, and we sincerely *trust* that the public spirited agriculturists, who have thus come forward with such true nobility of soul, to reward the thrice laudable enterprize of the Ohio company, will find that their own exertions to improve the stock of their respective sections of country, will meet with a becoming response from their brother farmers. But of that we do not apprehend any doubt; for the success which the *Bulls* that the Ohio Company sent out to service in their own and sister state of Kentucky, the past season, is at once the bond and guarantie that a like good fortune will await the present owners. As far back as May last, we learned that one of the Durham bulls owned by the Ohio Company, which had been sent to Clarke county, Kentucky, for service, had at that early period of the season had 60 cows at $25 each: and, indeed, our private advices go to show, that all the Durham bulls of unexceptionable pedigrees, both in Ohio and Kentucky, were doing full service at rates ranging from $10, 15, 20 to $25 each cow.

Such encouragement was due to the enlightened enterprise which influenced the gentlemen to encounter the expense and risk of importation, and reflects the highest credit upon the liberality of the people of the west. While we record such evidences of their enlightened views, we feel it due to the occasion to say, that it is by such deeds they have outstripped their neighbors this side the Alleghanies, and earned for their section of country the well deserved appellation of *The Great West;* for great must that country be whose patriotic people are impelled onward by such generous impulses—impulses which know no restrictive measure—nor recognise no mean limit of dollars and cents—compared with the advancement of their agricultural resources and the improvement of their domestic animals.

In looking at those sales one is struck with astonishment at the tardy pace that has marked the spread of this generous breed of animals throughout our country, and how much the more wealthy of our agriculturists have been at war with their interests. Having said thus much, we will leave it to our readers to draw their own conclusions with respect to the advantages which are likely to enure to them from introducing this peculiar breed of cattle on their estates:

SALE OF SHORT-HORNS,

Imported by the *Ohio Company for Importing English Cattle*, in the years 1834, 1835, and 1836—held at Indian Creek Farm, the residence of Felix Renick, Esq, Agent of the said Company, in Ross county, on the 29th day of October, 1836. The Stock of the Company was in fine condition and in great demand.

☞Notwithstanding the high prices at which the Cattle were sold, some of them exchanged owners immediately, at very considerable advances; and for others, more than fifty per cent. on their cost was offered and refused.

Reformer, a bull, not sound, sold to John T. Webb, of Ross county, O., for 48 dollars.

Matchem, a bull, sold to Abraham Renick, of Kentucky, for 1200 dollars.

Earl of Darlington, sold to Batteal Harrison of Fayette county, O., for $710.

Young Waterloo, a bull, sold to R. D. Lilley, of Highland county, O., for $1250 dollars.

Duke of York, a bull, sold to R. R. Seymour, of Ross county, O., for 1120 dollars.

Experiment, a bull, sold to James M. Trimble of Highland county, O., for $1150.

Comet Halley, a bull, sold to R. R. Seymour, of Ross county, Ohio, for $1505.

Whitaker, a bull, sold to William M. Anderson, of Ross county, Ohio, for $855.

Nimrod, a bull, sold to Elias Florence, of Pickaway county, Ohio, for 1040 dollars.

Duke of Norfolk, a bull, sold to Robt. Stewart, of Ross county, Ohio, for 1255 dollars.

Goldfinder, a bull, sold to Isaac Cunningham, of Kentucky, for 1095. Afterwards sold at private sale to Gen. Vance and J. H. James, of Champaign co. Ohio, for 1400 dollars.

Duke of Leeds, sold to John Crouse, jr. of Ross county, Ohio, for 575 dollars.

Windham, a bull, sold to Charles Davis, of Ross county, Ohio, for 500 dollars.

Columbus, a bull, (not sound) sold to Thomas Huston, of Pickaway county, Ohio, for $180.

Davy Crocket, a bull, sold to Peter L. Ayres, of O., for 490 dollars.

Snowdrop, a bull, sold to Stewart & M'Neil, of Ross county, O for 480 dollars.

Independence, a bull, sold to Heglar and Peterson, of Ross county, Ohio, for 400 dollars.

Perry, a bull, sold to Wm. H. Creighton, of Madison county, Ohio, for 400 dollars.

Goliah, a bull, sold to Isaac V. Cunningham, of Sciota, for 300 dollars.

Logan, a bull, sold to Elias Florence, of Pickaway county, Ohio, for 750 dollars.

John Bull, a bull, sold to Wm. Renick, jr. of Pickaway county, Ohio, for 615 dollars.

Paragon, a bull, presented by the company to Felix Renick, Esq. their agent.

Powhatan, a bull, sold to George Renick, sen. of Ross county, with Flora.

Rantipole, a bull, sold to Arthur Watts, of Ross county, Ohio, for 810 dollars.

Gaudy, cow, sold to Jas. A. Trimble, of Highland county, Ohio, for 985 dollars.

Blossom, cow, sold to R. R. Seymour, of Ross co., Ohio, for 1000 dollars.

Flora and her calf Powhattan, were sold to Geo. Renick, sen. of Ross county, for 1205 dollars.

Lilly of the Valley of Tees, sold to Tho. Huston, of Pickaway county, for 950 dollars.

Matilda, sold to Arthur Watts, of Ross county, for 1000 dollars.

Calypso, cow, sold to Strawder M'Neil of Ross county, for 325 dollars.

Young Mary and her calf Pocahontas, were sold to Edwin J. Harness of Ross county, for $1500.

Lady Blanch, (no proof of this cow being a breeder,) sold to Charles Davis of Ross co. for 250 dollars.

Tees Water and her calf Cometess, sold to John I. Van Metre, of Pike county, Ohio, for 2,225 dollars.

Duchess of Liverpool, sold to Wm. M. Anderson of Ross county, for 570 dollars.

Lady Colling, (it is doubted whether this cow will ever be a breeder,) sold to John T. Webb of Ross county, for 205 dollars.

Beauty of the West, sold to Ashel Renick, of Pickaway county, Ohio, for 900 dollars.

Lilac, sold to Elias Florence, of Pickaway co. for 425 dollars.

Lady of the Lake, sold to R. R. Seymour, of Ross county, for 775 dollars.

Lady Paley, sold to Alex. Renick, of Ross co., for 510 dollars.

Poppy, sold to Harness Renick, of Pickaway county, for 610 dollars.

Pink, sold to Wm. Trimble of Highland county, for 575 dollars.

May Flower, sold to Batteal Harrison, of Fayette county, Ohio, for 405 dollars.

Lucy, (pedigree doubtful) sold to George Radcliff of Pickaway county, for 105 dollars.

Moss Rose, sold to Jonathan Renick, of Pickaway county, for 1200 dollars.

Celestina, sold to Thomas Huston of Pickaway co., for $930.

Malina, sold to Isaac Cunningham for $1005.

Illustrious, sold to Abraham Renick, of Kentucky, for 775 dollars.

Lady Abernethy, sold to Thos. Huston of Pickaway county, Ohio, for 815 dollars.

J. L. TAYLOR,
Sec'y of the Ohio Importing Company.
Sciota Gazette.

PRINCIPLES OF VEGETATION.

As every thing which appertains to the production of so important a staple as wheat, must always be of profound concern to the farming interest, we insert the following from a British paper, under the confident belief, that it will elicit attention from every enlightened mind engaged in the pursuits of husbandry. The principles assumed, and facts set forth, will be novel to many of our readers, and will, we hope, set on foot a spirit of inquiry calculated to promote the great interest whose province it is to provide the staff of life for home and foreign consumption.

Principles of Vegetation—Wheat.—At the British Association in Bristol, Mr. O. Webb Hall read a communication "On the Acceleration of the Growth of Wheat." He called the attention of the Meeting to a statement of facts by which it would be seen that the usual period allotted to the occupation of the ground for a crop of wheat might be very materially abridged. At an average, this might be estimated at 10 months, though 12 and even 13, were not unusual, and 8 might be considered as the shortest period for the ordinary winter wheat. By a selection of particular seed, and a choice of peculiar situation, wheat sown early in March, has been, on different occasions, ripened before the middle of August, a period scarcely exceeding 5 months. Mr. Hall considers it an unquestionable law of vegetation, that the offspring of a plant of early maturity seeks to become so likewise, even when placed in unpropitious circumstances and that it recedes with reluctance from the condition of its parent. Hence the seed of a crop which has been ripened in 5 months has a better prospect of producing another crop equally accelerated than that from a crop which has been longer in ripening. He also asserted, that the acceleration of a crop was farther promoted by thick sowing, which likewise might be considered advantageous in checking and stopping the mildew.

Dr. Richardson referred to the remark of Humbolt, that in South America the wheat crop was ripened in ninety days from the period of sowing, and stated, that about Hudson's Bay this period was only seventy days. He suggested the probable advantages that might arise from importing seed from the latter country for the purpose of furthering Mr. Hall's views; but this gentleman stated, that he had found that seed imported from a distance (and he had tried some from Italy) was liable to become diseased. As connected with the subject of the acceleration of the growth of seeds, Professor Henslow mentioned results of experiments which he had tried upon seeds of a species of Acacia, sent by Sir John Herschell from the Cape of Good Hope, with directions that they should be steeped in boiling water before they were sown. Some of these were kept at the boiling temperature of 3, 7 and 15 minutes respectively, and had yet germinated very readily in the open border; whilst those which had not been steeped did not vegetate. It was suggested that these facts might lead to beneficial results, by showing agriculturists that they may possibly be able to steep various seeds in water sufficiently heated to destroy certain fungi or insects known to be destructive to them, without injuring the vital principle in the seed itself. Mr. Hope mentioned a practice common in some parts of Spain, of baking corn to a certain extent, by exposing it to a temperature of 150° or upwards, for the purpose of destroying an insect by which it was liable to be attacked. Dr. Richardson mentioned that the seeds sold in China for the European market, were previously boiled for the purpose of destroying their vitality, as the jealousy of that people made them anxious to prevent their exportation in a state fitted for germination. Upon sowing these seeds he had, nevertheless, observed that some few of them were still capable of vegetating.

[From the New England Farmer.]

AGRICULTURE, AS COMPARED WITH OTHER PURSUITS.

BY FRANCIS R. GOURGAS.

Tillage of the earth was the first employment assigned to man, and it is of all occupations the most pleasant and independent. It is one which not only requires physical ability, but if carried to the most profitable and praiseworthy extent, it also requires mental exertion—and by these very requisitions, it creates and preserves a healthy and vigorous state of body and mind. No individual need be happier or prouder than the cultivator of the earth—to be sure he has his cloudy days; the seasons are sometimes unpropitious, cutting short his crops, and grasping with an iron hand some of his dearest interests, but wrecks are found elsewhere than on his coasts. The merchant, and mechanic, and manufacturer, all have their moments of adversity to dread; and perhaps with not a single hope to cheer them on in their struggle between duty and self; the husbandman is never beyond hope, as long as his land exists and fertility continues to abide in its vitals—and when did either the one or the other fail?

But it is not the security of the farmer which alone recommends his situation, it is the inexhaustible source of pleasure always at his command. It is he, who can study to the most advantage the mysteries of nature—it is he, who has access at all times to her charms; the happy song of the bird strikes pleasantly upon his ear; the morning breeze comes gratefully to his brow, the rising sun, the beautiful flower and every varying foliage, the joyous insect, and the thousands and tens of thousands of objects blessed and indulged under the guidance of a kind Father—are to him scenes glorious and great. He is not confined to a dwelling, to perform the mental drudgery and make the dry calculations of the merchant; nor to a shop, to go through the laborious and tiresome operations of encountering the dangers and partaking of the toils, and hardships of the mariner; in the charming language of Bloomfield,

"——No wilds has he to roam,
But bright enclosures circling round his home."

Such is the husbandman's lot, which so many affect to dread, and which *formerly* so many affected to despise; it possesses more advantage to recommend it to the notice of man, than any other employment upon the wide earth. It is an occupation admirably calculated to improve and exalt the human mind, from the very circumstance, that the mind is continually called upon, to study and observe and admire the works and providence of a superior Being; there is not a particle of earth, nor an insect, nor an herb, but which affords food for an intelligent mind to taste and enjoy. The great phenomena of nature, which have at different times been discovered, and whose discovery has brought about revolutions, and effected changes, (the thoughts of which would have before started the very soul of man,) have been first observed and made known, by those engaged in the pursuit of Agriculture—a fact which ought to excite love and attention to the subject.

In pursuing this avocation, man has opportunities to perfect his acquaintance with many of the sciences—which, if he was otherwise engaged, he might not so conveniently avail himself of. A farm is a vast text book of chemistry, botany, &c. proving their principles, and continually testing the efficacy and value of the application of those principles—and man in purchasing it pays nothing for these treasures of knowledge it contains. He may analyze soils, and discover the properties and use of herbs and plants, and do this, as it were, in the regular course of business; without hardly devoting an extra hour on the subject; and moreover, a healthy system and a firm and vigorous mind bring to the task that energy and devotion which insures success.

It is not the least recommendation of Agriculture, that those engaged in it are the most independent class of men on the globe. They are subservient to no one, on the contrary every other business is supported by them; if the vessels of the merchant were rotting at the wharves, the sound of the hammer was no longer heard, the husbandman might still go on. To be sure, the market for his produce might be dull and the commodity of money scarce, but he might still live comfortably, and every article of clothing and diet could be had, which ought to be found on the list of comfort and convenience; his school master, and other functionaries whom he must necessarily employ, might be hired as in olden times, on a salary of potatoes or pumpkins. Take it in what light you will, the independence of the farmer is a just and a noble dispensation of providence; it is he, who bears the "burden and the heat of the day," and whose mind by the nature and constancy of his employment is raised above the little trickeries and miserable evasions of trade,—and it is he, therefore, who should stand first on the roll of merit.

I cannot better close these remarks than by observing, that at the present day the husband-

man is beginning to participate largely of the honors and offices of his country. Men of thorough academic education, distinguished and wealthy individuals, are taking a personal interest in agriculture—setting their own shoulders to the wheel, and encouraging and assisting others to do the same. It is astonishing what a revolution has taken place in regard to this subject within the last half century; formerly our public offices were held altogether by professional men—now their seats are occupied by manual laborers, men who are an honor and a light to their country. This is right and natural; the farming community is the largest, and it would be singular if they were obliged to select their representatives from any other class. It should be recollected then by every individual entering upon life, that a choice of Agriculture as his avocation will by no means close the gates of popular favor against him, but on the contrary will be a hearty and warm recommendation wherever he may go.

CHEAP STRUCTURE FOR GRAIN & HAY.

Jesse Buel, Esq.—Sir,—The remarks upon "stacking grain," contained in your August number of the Cultivator, induce me to recommend a kind of barrack, which I have used for several years, and which I think pays for itself in a short time. We will suppose that you wish to erect one which shall contain one hundred loads of grain or hay. Take twenty posts twenty feet in length, and about eight inches diameter, and set them in two rows; let the rows be *sixteen* feet apart, and the distance be between the posts the other way, twelve feet; the posts must be put 4 feet in the ground; frame plates on these posts from end to end of the rows, and bind them together crosswise by girts, let in about two feet from the top, strengthen this crosswork by braces eight feet long; you will understand, of course, that the braces go from the girt to the posts.—Set on the plates, rafters of such length as will allow an Albany board, (when laid on for covering,) to project one and a half feet below the plate, make use of one and a quarter inch stuff for lath, laying one row at the ridge, another about midway of the rafter, and a third just clear of the plate. In putting on the roof-boards, every other one rides, and ought to lap on the edges of its supporters one and a half inches. The ends of the building are to be boarded from the peak till within six or eight feet of the ground, (this makes a string-piece or two necessary, which may be of plank,) and accommodated with a large window, having a sliding shutter.—On the sides of the building, you board down from the plate with three Albany boards, remembering to have a strip of plank about six inches wide, to tie them together in the middle. It will be well also, to put pieces of board along the ridge under the board that rides—this to prevent rain or snow from driving in. Your barrack is now completed.

In mowing away, you drive under, and fill one joint, or the compartment included by four posts, at once; when you get to the last end, that must be filled from the outside, through the window.

These buildings are cheap; they preserve hay and grain in a perfect state; they obviate the necessity (often a very galling one) of employing an artist to stack; grain never grows in them; this may appear like repetition; but I must be excused for contrasting them with stacks, in this important particular, they will shelter several loads at a time when you are threatened with showers; or, you can drive under several loads at night, and let your hands store them away before breakfast; being a part of the day often wasted, even in the busiest season of the year. In the winter, when the exterior sheaves of stacks are penetrated to the bands with snow and sleet, so as to prevent thrashing for days, the grain in these buildings may always be got in, in order, excepting perhaps a very little on the windward side, which should be kept by itself till dry; poultry make no impression on grain in these buildings.

The last one which I built, (being No. 3,) was calculated for 40 loads, and this cost me (exclusive of timber which was cut on the farm) $65,20. Persons who have not locust for posts, would do well to char the surface which is to go under ground.

Permit me to ask a question. Are you familiar with the use of the horse rake, the revolving rake; and did you intend to apply your remarks about curing hay *in cock*, to a country where this rake can be used?*

With high respect, your ob't ser't,

A SUBSCRIBER.

P. S. In mowing grain under these barracks, it is best to keep the middle of the mow highest, and to give the outer course of sheaves a good pitch. Moreover, a floor of poles, or rails, laid upon stones so that cats can go under, answers a good purpose.

* We *are* familiar with the revolving horse-rake, and commend it greatly on old thin meadows. Clover belongs to alternate husbandry, where the grass ought to be too heavy for its use, and it is not used in our mode of making clover hay, *till after the crop has been carted from the field.*—Conductor.—*Cultivator.*

SURFACE MANURING.

Until very lately, the opinion was very general, if not universal, that fermented manures should be turned under with the plough as soon as put on the land; and that otherwise their value would be much impaired, if not totally lost by evaporation. This was thought especially necessary, if the manure used was rough or half rotted.

I have thought much on this subject, and for the last twenty years marked the effects of manure in all its various modes of application, both on my own farm and on my neighbours'— and now propose to give you the results of my observation, leaving it to persons more learned than myself to reconcile these results to the principles of philosophy. Fifteen or twenty years ago, I observed an old man of good practical sense, and successful as a farmer, carting manure out in the month of July, on a field intended for Indian corn the next year: this was spread as fast as carted, and remanined in that situation until spring following. He justified this practice by a perfectly unanswerable reason, viz: that experience had taught him, that both his crop and his land were more improved by the use of his manure in that way, than any other he had tried. The confidence I had in the integrity and good sense of this old gentleman induced me to make repeated experiments on this subject, all of which have been decidedly favorable to top dressing, or surface manuring, and proved to my entire satisfaction, "that manure, when in contact with the earth, does not lose its strength by evaporation." This, I was exceedingly loth to believe, and I made many efforts to account for the fact—(for that I could not doubt)—and at length came to the conclusion that the chemical affinity between the parties, of manure and the earth, was too strong to be overcome by the power of evaporation; and that the apparent evaporation is nothing more than the passing off of the water, which had been contained in the manure. Whether this is so or not, I am sure I do not know. But I *do* know, that in the many different experiments I have made, both the land and the crop are more benefitted by the application of manure *on* the land, than by turning it *under* the land. I hope young farmers, who are not yet wedded to any set of opinions, will be induced (at least) to make the experiment.

Not having fame as a farmer, to give weight to my opinions, I shall sign myself

ARATOR.

Note.—The late Mr. Thos. West, brother of Sir Benjamin West, settled on a farm in New Jersey, after he had reached the age of forty. His object was to make it a grazing farm. He used no plough whatever, but the hoe and scythe to eradicate briars, weeds, &c. He top dressed his fields, or some of them, every year, and in a few years, he had the richest farm in the whole country around. See Memoirs Philadelphia Agricultural Sociey.

WILSON'S MOWING MACHINE.

Having witnessed the exhibition of this machine in operation last Thursday, on the farm of Mrs. Van Rensselaer, at Greenbush, we consider it due, both to the inventor and the public, to state that we think it performed all that could have been anticipated of a machine for the purpose.

It was propelled by two horses, and mowed a swarth more than six feet wide, as fast as the horses could walk; and as it is provided with a self-sharpening power, and needed no stops to sharpen, it must, we think, mow about one acre per hour; and notwithstanding the ground was very rough, and the grass dry and tangled, it was left in a handsome order. It is intended also to cut grain, and though we did not see the operation performed, we were fully convinced from its success in grass, that it will be equally successful in the harvest field.

As the manufacturing interest is now, by the aid of labor-saving inventions, infinite lengths ahead of agriculture in the race of improvement, it cannot but be cheering to every patriotic eye, to see inventive genius coming into the timely aid of agriculture, which, though thus far neglected, is well worthy of all the aid which human talent can bestow; and we think, with a few more such inventions as the one in question, agricultural stock may stand in fair competition with those of cotton spinning, the steamboats, or rail roads.

Albany Argus.

[From the National Atlas.]

PHILOSOPHY OF VEGETATION.

How wonderful is Nature! In the earth,
The tiny seed is sown, and from it springs
A tender plant that bends before the breeze,
And shivers in the blast. But mark it now
When years has past, a mighty trunk has risen.
And giant limbs that stand unmoved, and dare
The lurid lightnings and the storms of Heaven.

Could we but put aside the veil which is thrown over our senses, and could the untrammelled soul look forth upon the operations of nature, as they take place around us, how glorious would be the privilege, how ecstatic the enjoyment! But on the contrary, we can view the wonders around us only as through a glass darkly, and the senses are continually imposing upon the judgment. The chemical work-shops, or laboratories of nature, are almost entirely closed upon our senses, and we are compelled to gain our knowledge from the smoke which arises from her chimnies, and the occasional glimpses we can obtain through her windows. Yet the great author of nature has given us insight enough to make us wonder at, and adore his mighty power, without our becoming vain and proud of our own acquisitions of knowledge.

Men generally are unaware of the fact that there are many things around us of which we know very little, though they are undergoing their changes, and working strange phenomena every day in our sight. Some of the loftiest sciences, and most abstract operations of nature are often better understood than those which are immediately around us, and continually operating before our eyes. As an exemplification of this I will mention the phenomena which takes place in sowing the seed, and in the growth of the vegetable kingdom. There are very few, comparatively speaking, who know how the seed germinates, and the plant is nourished and grows, though they converse learnedly on the erratic disposition of comets, the attraction and gravitation of bodies, and the movement of the plants. Though they every day see them springing and growing around them, yet they are not aware that they are so absolutely necessary to human life, that the animal and vegetable kingdoms are reciprocally dependant upon each other, and that the purity of the atmosphere is actually kept up by the oxygen which is wasted in the vegatable kingdom.

Nature is very simple in all her works, she requires but few ingredients, oxygen, hydrogen and carbon being the principal, out of which she manufactures so many varieties of forms. The earth it appears serves little other purpose than as a matrix for the seed and plant, as very small portions of earth have ever been found in vegetable compounds. The earth is the channel or medium through which the plant receives its nourishment, and it also serves as a support to the roots of trees. All manures are good or bad in proportion as they contain the vegetable principle or food of plants, which is prepared by the decomposition of vegetable matter. Water is absolutely necessary to vegetable life, inasmuch as it takes up the saline and unctuous particles in the manure, and conveys them to the roots of the vegetable. If the soil is sandy it will not hold a sufficiency of water, if too solid with clay, the water will collect in too great a quantity, and produce decomposition of the roots. Calcareous soils, or those containing the carbonate of lime are best adapted to the growth of plants, though it is often necessary to vary as potatoes do best in a sandy soil, wheat in a rich and rice in a moist soil. A ferrigenous soil for fruit trees, and a moderately rich sandy bottom for forest trees.

In cultivating the Italian Mulberry, and the Morus Multicaulis, I have experimented on the relative properties of animal and vegetable manures, and find that the former is the best, inasmuch as it contains more nitrogen, which renders it more complicated, and consequently more favorable to decomposition. Animal substances cause vegetable matter to ferment with greater facility.

But let us examine a seed of the mulberry for example, and trace its progress from the earth. The external covering contains, beside the germ of the future plant, a substance, which is to serve it for nourishment in the early stage of its existence. This substance is called the *parenchyma*, and consists of focula oil and mucilage. The seed is generally divided into two parts called *lobes* or *cotyledous*, as may be observed in different kinds of beans. There is a dark colored cord or string which divides the lobes, and is termed the *radicle*, from the latin word radix, the root, as this string becomes the root of the future plant. Enclosed within the lobes is another part termed *plumula*, from which the trunk of the tree proceeds. All seeds have not the same number of catyledous; barley, wheat and oats, and the grasses have but one. Some are found to have two, three, and others as many as six. When the seed is deposited in the earth, and the heat of the atmosphere is any degree above 40, the first operation it performs is to imbibe water. The seed softens, and the lobes swell. An absorption of oxygen then takes place, which unites with the carbon of the seed, and is returned in the form of carbonic acid. The loss of carbon consequently increases the proportion of oxygen and hydrogen comparatively in the seed, and as a natural consequence the saccharine fermentation takes place. By this process the substance of the parenchyma is changed to a soft, sweet pulp. The action of heat on the seed swells it to such a degree that it cannot contain itself, and the root darts forth, and stikes into the earth. The stem also pierces its covering, and passes up into the air, carrying with it two leaves, which are called the seminal leaves, and serve to elaborate the sap destined to support the stem. Thus the cotyledous now becomes the seed leaves, or lungs of the tree.

There is a very strong resemblance between the seed and an egg. Heat is necessary to develope the living energies of both, and there is a substance in each destined to supply nourishment to both in the early stage of their existence. So soon as the chick can provide for itself the egg breaks, and so soon as the roots of the tree can imbibe ample nourishment from the soil, the seed leaves drop off. Indeed there is a stiking analogy between the whole vegetable and animal kingdoms.

So soon as the root branches off, and commences feeding from the soil, leaves become necessary to elaborate the sap and render it fit to nourish, and form the growth of the tree. Here we also see a striking resemblance between the functions of the leaves of plants, and the lungs of animals. There are vessels which serve in the animal system, to suck up and convey from the stomach and bowels a fluid called chyle, which is conveyed to the lungs, and there is brought in contact with atmospheric air, and is oxydized or fitted to nourish every part of the frame. In like manner the roots suck up water, from the roots it is conveyed by certain vessels to the leaves were it undergoes a change, and becomes the sap or blood of the plant, which is conveyed to and nourishes every part of the tree. The upper surface of the leaves, it is said, throws off by transpiration the superabundance, while the lower surface on the contrary, which is rough and downy, absorbs moisture from the atmosphere, thereby obtaining those ingredients in the air necessary to its health. Thus the greater the quantity of the foliage, the greater is the quantity of water taken up by the roots, and transpired from the upper surface of the leaves. Air and light appear to be essentially necessary to the existence of the vegetable creation. Light is necessary to the formation of colors. If you plant a potato in a dark cellar it will be perfectly colorless, and if a hole be made through which light may enter, the vine will turn towards it, and endeavor to reach it.

How beautifully does nature dispose the leaves on the stem of the plant. The under side of the leaf being intended to absorb moisture from the air, and the dews of night as they arise from the ground, the leaves are so arranged that one shall not be immediately over another. By this arrangement the under suface of each leaf is exposed to the ascending moisture of the earth. You will occasionally see the leaves placed alternately on two parallel, and opposite lines; again they are arranged in pairs crossing at right angles; and again they are placed on the angles of polygons, circumscribed on the branches, and arranged in such a manner that the angles of the inferior polygon corresponds with the sides of the superior. On some plants they ascend the stalks in parallel spiral lines.

It may be proven to actual demonstration, that the under side of the leaf is intended to absorb moisture, from the earth and atmosphere. If leaves be plucked, and the under sides be placed on a basin of water, they will remain green for days, and even weeks, but if they be placed with the upper surface in the water, they perish in a very short time. Herbs that grow more rapidly than trees have both surfaces of the leaves rough, nearly alike, and absorb moisture more rapidly from the atmosphere. The fact of the upper sides of leaves being smoother, more glossy, and of a deeper color indicates a different use. If you incline the stalk of a tree it will turn and grow upwards. If you bend the branch of a tree so that its leaves are reversed in regard to natural position, the leaves will continually endeavor to turn back again, and will finally succeed. Plant a seed upside down so that the root shall start upwards and the stem downwards, and in a short time the root will turn and dive into the

earth, while the stem will also turn and start upwards into the air.

I have said that water is the chief nourishment of plants. It not only forms the sap, but it is the basis of all vegetable fluids. Through the medium of water all the ingredients, such as salts, &c. are carried into plants. The organs of the plant have the power of decomposing water, and thus the hydrogen of the water serves as a constituent of oil, of coloring matter, &c. and the oxygen aids in the formation of mucilage, of fecula, of vegetable acids, sugar, &c. The greater portion of the oxygen of the water, however, is changed by caloric into a gaseous state, the caloric proceeding from the hydrogen during the condensation it undergoes, in forming the materials of the vegetable. This gaseous oxygen is thrown off into the atmosphere by the leaves of plants. Thus the atmosphere is continually rendered pure, and the loss repaired, which is necessary, inasmuch as the constant oxygenation and combustion of substances, and the respiration of animals, are continually exhausting it. Thus too is there a mutual dependence between the animal and vegetable kingdoms as the plant is sustained by the substances thrown off by the lungs of animals, and the animal by the oxygen thrown off by plants. How wisely formed, how harmonious are the works of nature! How strange is the fact that we could not possibly exist any length of time without the vegetable creation, for the carbonic acid which is thrown off by animals in breathing would collect to such a degree in the atmosphere, as to render it entirely unfit for respiration, and death to the animal creation would be the consequence. But here how wise is the dispensation of Providence! The vegetable kingdom attracts, and decomposes this carbonic acid, and after making use of the carbon for its own purposes returns the oxygen to the atmosphere, for the use of ourselves, and the rest of the animal creation.

But let us return to the formation of the tree. Having traced it from the seed to the putting forth of the roots and stem, we will speak of the bark. The bark is composed of three parts, the *epidermis*, the *parenchyma* and the *cortical layers*.

The epidermis is a thin external skin particularly observable on cherry trees, as it may be easily pealed off. Upon examination it is found to be a thin membrane, through which the light is transmitted, and consists of five slender fibres, which cross each other in the manner of a net. In some trees, and in corn this membrane has a thin coat of siliceous earth, which gives it great strength. In some plants this membrane is composed of wax, and in others it is resinous.

The parenchyma lies next to, and is immediately under the epidermis. When the epidermis is stripped off it appears like a green rind, and is found not only on the trunk and branches, but extends to every part, even to the leaves. It is full of tubes, which contain a kind of fluid.

The cortical layers are immediately between the parenchyma and the wood. They are full of small vessels, which convey the sap downwards after it has been elaborated in the leaves. They contain a quantity of gallic acid and tannin.—Every year the old cortical layers are formed into wood, and new ones are formed.

The woody part of the tree, which is composed of woody fibre, mucilage and resin, is called the *alburnum*. The fibres of the alburnum run two ways; some of them longitudinally, and is called the silver grain, while others called the spurious grain, are disposed in a concentric manner. From the layers of the spurious grain, the age of the tree may be computed, one being formed every year by the conversions of the cortical layers into wood. The roots of the tree suck in water from the earth, and the tubes in the alburnum, or wood convey it upwards to the leaves, where the tubes unite with the extremities of the arteries of the cortical layers. Here then is a resemblance to the circulation in the animal system. The water pumped up by the roots is the chyle, which the absorbent vessels suck up from the stomach and intestines, and convey to the lungs to be oxydized. So the water of the roots is conveyed by the vessels of the alburnum to the leaves or lungs, and from them is distributed to the parts of the plant. But here the simile fails, as the plant has nothing answering to the human heart, from whence the blood is distributed after receiving it from the lungs. In the plant the sap is distributed from the lungs, but not by the way of a heart.

By the heat of the spring the small vessels of the plant expand, and partly perhaps by forming a vacuum, and partly by a capillary attraction the sap is carried up from the roots by the vessels of the alburnum into the leaves, where it undergoes a chemical change, and becomes fitted for the nourishment of the plant. The vessels of the cortical layers now take it, and convey it to all parts of the plant. The tubes in the parenchyma are much larger than those in the sap, and serve perhaps to secrete some peculiar fluid necessary to the health of the plant, as the liver does in the human system. The juices of plants differ, and often in the same plant. In the centre of the alburnum is the heart wood which appears to have no life, and the longevity of trees is owing to the want of this heart wood. The long life of the oak is no doubt owing to the small portion of heart it contains. In the hickory this heart wood gains upon the sap wood in a double ratio, and when grown old gradually spreads towards the bark, till the living and active portion is not sufficient to nourish the tree, and it dies.

How the several juices are made, and how certain changes are affected in the formation of the fruit, and the parts of the tree, is a mystery which has never been solved. The organs, by which those changes are affected, are so small as to escape all observation, and hence we are left in the dark on one of the most interesting points of vegetable economy. It appears that trees possess an internal heat, in which respect they also resemble the animal. A small portion of carbonic acid is carried with the sap from the roots which the internal heat of the plant serves to disengage. Indeed the whole plant is a chemical laboratory, in which the various changes are effected, and new combinations produced.

At the first appearance of a plant it is almost of a gelatinous consistence, but by a chemical change, which takes place in the juices which flow to it, the stock becomes harder and harder by degrees, till it assumes the nature of wood.—The part of the stalk nearest to the root hardens first, and grows in a double ratio compared with parts above. After a while this part ceases to harden and grow, and the same effect takes place in a part immediately above. Thus it progresses upward till the whole stalk assumes the nature and consistence of wood. After this a succession of concentric layers take place, which are produced by the hardening into wood every year of cortical layers.

In the propagation of vegetables there is no resemblance to the animal kingdom. Vegetables may be propagated by seed layers and cuttings. The pistil and stamina in plants answer the same purposes, as the organs of generation in animals. The seed are inclosed in the former, and the *pollen* or fine powder of the latter fecundates it. Both sexes are often united in one plant, while in other species the male is on one stalk, and the female on another. Other species are distinct like animals in the sexes.

It appears that buds, and even leaves have within them the elements of the future tree, and hence a small stick cut from a tree having two buds on it, may, by being placed in the earth produce a tree. The lower bud will swell, and throw out roots while a tiny stem will start up into the air, from the upper bud. It is thus that the most of the Morus Multicaulis trees are now produced by the cultivators of silk in this country. It appears astonishing that a single leaf or piece of stick should be placed in the earth and there bud, and produce a tree in the same manner as the seed. The organs essential to life seem to be placed in every part of the plant, and consequently the means of propagating are multiplied.

There is yet another mode of multiplying, called grafting. Theophrasus informs us that a bird which had swallowed a fruit dropped it in the cleft of a tree were it grew, and became completely united to the original, though it proved to be a different kind. Hence sprung the art of grafting, and hence we see that it is of very remote origin. The graft which is fixed to another may be said to one tree taking root, and growing another, for it preserves its original. There appears to be a necessary congeniality to succeed in grafting. A plum tree will not grow upon an apple, but an apple will succeed upon the pear, as the seed of their fruit are alike. It is something very astonishing that apple seed will not produce their kind, but that the seed of one apple may produce a half dozen different trees; among which there may not be one bearing fruit like the original. Hence the use of grafting to produce and continue choice fruits, and also of propagating trees by cuttings, as they invariably produce their kind.

The Morus Multicaulis, I believe is now generally propagated by layers and cuttings, as the seed cannot be depended upon, being said to produce hybrid varieties or mixtures of the common white. The product of a few of the Morus Multicaulis trees when propagated by layers and cuttings is astonishing. Judge Comstock, if I do not mistake, mentions a gentleman, who thus produced from two trees in one season two hundred and two, besides the original two. The

rapid growth of the Morus Multicaulis is another great requisite which must render it a favorite. I have one growing before the window at which I write, which was sent to me as a present two weeks ago by Mr. Webster. Notwithstanding that it was taken up at a wrong season it grows with great rapidity, which is perceptible every three hours. In one week it has grown three or four inches in height, notwithstanding the stunning effect produced by being transplanted. The first week after transplanted it grew none.

Vegetable life is the link which unites the animal and mineral kingdoms, inasmuch as mineral substances are introduced into the animal system. "All flesh is but grass," and it is by the consumption of vegetable matter by the animal, that the simple elements are conveyed into, and become a part of the animal frame. Vegetation is simply the vehicle in which nature prepares the nourishing elements destined for the support of the animal creation.

MILFORD BARD.

Russian mode of making butter.—Sir,—Observing in a monthly scientific journal, an article on the subject of making butter in the winter, I beg leave to furnish the particulars on that subject, as practiced in Russia since the year 1816, and which may, perhaps, be of some service to those who may be induced to make the experiment either in summer or winter. Being in that country in the year 1834, I was informed by a Russian nobleman, that the proprietor of an extensive estate (also a nobleman of high rank) had discovered a new mode of making butter, and had received letters patent from the Emperor as a reward for the discovery, and which he stated at the time as being in full and successful operation. The process consisted in boiling (or rather a species of boiling, called simmering) the milk for the space of fifteen minutes in its sweet state; observing at the same time not to use a sufficient heat to burn the milk: it is then churned in the usual manner. He also stated that no difficulty ever occurred in procuring butter immediately, and of a quality superior far to that made from milk which had undergone vinous fermentation; and that in addition to its superior flavor, it would preserve its qualities much longer than that made in the ordinary mode; that the additional advantages were, that the milk, being left sweet, is almost possessed of the same value for ordinary purposes, and by some considered more healthy, as they supposed the boiling or scalding to destroy the animalculæ or whatever it may have contained.

If the above process should, upon experiment, prove of sufficient importance, as to bring it into general use, particularly in the winter, it would perhaps be to the advantage of those who may practice it, to have their milk scalded in vessels calculated to stand in the kettle or boiler, by which mode the danger of burning the milk would be avoided, for it is ascertained that milk only burns on the edges of its surface, or where it comes in contact with the sides of the vessel in which it is heated, which can never happen in double kettles or where one is placed within the other.—*London Mirror.*

Beet Sugar—This subject is beginning to attract great attention in the United States. Its cultivation appears to be simple, and lucrative, and the climate of our country is well adapted to it. It is becoming one of the staple articles of France, although it is not many years since it was in its infancy there. Bonaparte we believe patronised its manufacture, and encouraged its culture, as he justly conceived that no nation could be independent while it annually exported millions of dollars for sugar. A friend favored us with two or three selections on the subject, which were published in the Record, a few weeks since. We are happy to see that many of our Chester county gardeners and agriculturists are turning their attention to it.—*Westchester [Pa.] Record.*

A fine Cow—Mr. Isaac Edwards of Penn township, informs us that one of his cows has yielded him from the 1st of April to the 21st of October, the aggregate gum of $34 50. During the same period of time she has averaged one pound of butter each day.

The wheat crop in France is represented as being worse than it has been for many years.

THE MULBERRY PATCH.

Although desirous of enlisting the Commonwealth, and particularly the Farming interest, to engage in the culture of Silk, yet we would not urge our Farmers to give up the corn crop, for the sake of introducing the culture of the Mulberry. *We advise no such thing.* But we do recommend, that every Farmer would appropriate a small patch of land for the culture of the Mulberry, that the females of the family, (who, after all, are to be the *producers* of silk,) may try the experiment with the men in the common and usual crops of the field, and see which will earn the most, with an equal investment, for 3 successive years. If you have any *poor, sandy, gravelly* patches of land, within a reasonable distance of the house, on that let Chinese Mulberry be set, because on such land the Chinese Mulberry will do well. Although it may appear paradoxical, that the poorest soil is the best, such is the case, when well stocked with the Chinese Mulberry; not only because a crop of Mulberry will yield more profit on *such land*, than any other crop, but because it matures wood earlier; whereas, if set on rich land, it would continue to grow and make green shoots until winter set in, and kill every part of the unmatured wood. It is on this principle that it has been recommended not to stir the earth about the Mulberry after the first or middle of August, and because it is a peculiar property of the Chinese Mulberry to grow most vigorously on August and September, unless checked by frosts or by plucking the leaves and topping the plants.

Travellers inform us, that in France, after feeding the worms, the after luxuriant growth of foliage is gathered and fed out to cows and other cattle, and is eaten with great avidity. We have done the same ourselves and find that it accords with facts.—*Silk Cabinet.*

Printed by Sands & Neilson, N. E. corner of Charles and Market streets.

PATENT HORSE SHOES,

Made of best refined Iron, and every shoe warranted—Any failing to render the most perfect satisfaction will be received back, and the money paid for the same refunded. A constant supply for sale by

THOMAS JANVIER, Agent,
67 Smith's wharf.

P. S. Henry Burden has obtained letters patent from the government of France, granting him the exclusive privilege of manufacturing horse shoes by his newly invented machines. nov 22 3m

POINTERS FOR SALE.

A *thorough bred Pointer Slut*, of most symmetrical proportions, beautifully marked with large black and white spots; of noble size, ears pendant. She is rising 3 years old; under good command; well broken; quarters finely, and hunts with great animation and spirit. Her price is $40. To any gentleman wishing such an animal either for immediate use in the field, or for a breeder, she would prove a most invaluable acquisition.

ALSO, a *male Pup*, 4 months old, of fine form and growth, and genuine blood—his price is 20 dollars.

Applications to be made to the editor of this paper.
no 15 4t

DEVON STOCK.

THE *editor* of the *Farmer and Gardener* can at all times supply orders for Devon Cattle. This breed is so distinguished for their easy keep and docility, the richness of the milk of the cows, and for the activity and sprightliness of the oxen, that they would be admirably suited to the purposes of southern agriculturists.

The happy adaptation of the Devonshire Oxen, for the purposes of the farm, will be understood, when it is stated that 4 oxen have been known to plough 2 acres of ground in a day, and a team of them to trot at the rate of 6 miles an hour with an empty wagon.

Any person wishing to procure them can be supplied by addressing a letter, post paid, to the editor of the Farmer and Gardener. no15

AN AYRSHIRE BULL FOR SALE.

A Bull of the above breed, of well attested pedigree, is now on sale by the editor of this paper.

Letters on the subject must be *post-paid*. oc4

FRUIT AND ORNAMENTAL TREES AND SHRUBS FOR SALE,

At Clairmont Nurseries, near Baltimore.

THE subscriber hereby informs his customers and others, that his stock for sale this season of all articles common in the nursery line, except the tenderest green house plants, are very thrifty and mostly of large size, and of extent and variety not surpassed by many, if any in America. Particularly the Apple and Peach; Ornamental trees; Roses and other Shrubs. Of the Morus Multicaulis, white Italian and other Mulberry Trees, he has got about 100,000; the former, 2 to 7 feet high, strong thrifty plants with good roots; white Italian, also the same for their height, 1 1-2 to 4 feet—the 2 feet and 1 1-2 will be sold low, and all other articles on moderate terms. For prices and sorts of fruits, ornamental trees, shrub, and fruit shrubs, &c. see printed and priced catalogues to be had of the subscriber, gratis. He has a superb collection of Double Dahlias, now in full bloom, comprising upwards of a quarter of an acre. To see them, and the nursery generally, the citizens and others are respectfully invited.

se 27 ROBERT SINCLAIR.

CAULIFLOWER SEED.

I offer sor sale a superior lot of early Cauliflower seed for fall sowing, to insure a certain crop of large Heads of this very desirable vegetable, the seed should be sown in the month of September in frames and planted in very rich well tilled light soil. R. SINCLAIR, Jr.

aug 30 Light near Pratt-st. whf.

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Notice of an article on vegetable philosophy—American silk and the inducements to the culture—northern corn, and artichokes—great sale of Short-horn Durhams—principles of vegetation—advantages of agriculture compared—cheap structure for grain and hay—surface manuring—account of Wilson's mowing machine—interesting essay on the philosophy of vegetation—Russian mode of making Butter—culture of beets for Sugar—crop in France—a fine Cow—Mulberry culture—advertisements—prices current.

BALTIMORE PRODUCE MARKET.

☞ *These Prices are carefully corrected every* MONDAY

	PER	FROM	TO
Beans, white field,	bushel.	1 75	—
Cattle, on the hoof,	100lbs.	5 75	7 50
Corn, yellow,	bushel.	88	90
White,	"	85	86
Cotton, Virginia,	pound.	—	—
North Carolina,	"	—	—
Upland,	"	18¼	20
Louisiana 20a21—Alabama	"	18	21
Feathers,	pound.	50	—
Flaxseed,	bushel.	—	1 50
Flour & Meal—Best wh. wh't fam.	barrel.	12 50	13 00
Do. do. baker's	"	—	—
Do. do. Superfine, ex.	"	10 50	10 75
Super How. st. in good de'd	"	10 50	—
" " wagon price,	"	10 25	—
City Mills, extra,	"	—	10 50
Do.	"	—	10 25
Susquehanna,	"	—	10 50
Rye,	"	6 00	6 25
Kiln-dried Meal, in hhds.	hhd.	—	21 00
do. in bbls.	bbl.	—	4 62
Grass Seeds, red Clover,	bushel.	6 75	7 25
Timothy (herds of the north)	"	3 50	4 00
Orchard,	"	—	2 75
Tall meadow Oat,	"	—	2 75
Herds, or red top,	"	—	1 25
Hay, in bulk,	ton.	—	20 00
Hemp, country, dew rotted,	pound.	6	7
" water rotted,	"	7	8
Hogs, on the hoof,	100lb.	8 00	8 25
Slaughtered,	"	—	—
Hops—first sort,	pound.	16	—
second,	"	14	—
refuse,	"	12	—
Lime,	bushel.	35	37
Mustard Seed, Domestic, —; blk.	"	3 50	4 00
Oats,	"	—	48
Peas, red eye,	bushel.	—	—
Black eye,	"	1 12	—
Lady,	"	—	—
Plaster Paris, in the stone,	ton.	4 00	5 00
Ground,	barrel.	1 50	—
Palma Christa Bean,	bushel.	—	—
Rags,	pound.	3	4
Rye,	bushel.	115	125
Susquehannah,	"	—	—
Tobacco, crop, common,	100 lbs	3 50	4 50
" brown and red,	"	4 50	0 00
" fine red,	"	7 00	7 90
" wrappery, suitable for segars,	"	5 00	10 00
" yellow and red,	"	6 00	8 00
" good yellow,	"	8 00	12 00
" fine yellow,	"	12 00	16 00
Seconds, as in quality,	"	4 00	5 00
" ground leaf,	"	5 00	8 00
Virginia,	"	7 00	14 00
Rappahannock,	"	—	—
Kentucky,	"	8 00	14 00
Wheat, white,	bushel.	—	2 25
Red, best	"	2 05	2 13
inferior,	"	1 40	1 90
Whiskey, 1st pf. in bbls.	gallon.	42	42½
" in hhds.	"	39½	—
" wagon price,	"	36	37
Wagon Freights, to Pittsburgh,	100 lbs	1 75	—
To Wheeling,	"	2 00	—
		washed.	unwash
Wool, Prime & Saxon Fleeces,	pound.	50 to 60	30 32
Full Merino,	"	45 50	28 30
Three fourths Merino,	"	42 45	28 28
One half do.	"	38 42	26 28
Common & one fourth Meri.	"	35 38	26 28
Pulled,	"	38 40	26 28

Howard st. Flour, sales limited, receipts very light.

PLACE WANTED AS OVERSEER.

A young, industrious, and enterprising man, who is a good farmer and understands the management of hands, wants a situation in the above capacity. Any person wishing to employ such a person will please address a letter to Elie Plummer, Chestertown, Md. no 15 2t

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
Apples,	barrel.	—	18
Bacon, hams, new, Balt. cured	pound.	17	15
Shoulders, do.	"	—	15
Middlings, do.	"	—	14
Assorted, country,	"	—	37
Butter, printed, in lbs. & half lbs.	"	25	28
Roll,	"	20	25
Cider,	barrel.	1 00	1 25
Calves, three to six weeks old	each.	4 50	6 00
Cows, new milch,	"	35 00	50 00
Dry,	"	10 00	13 00
Corn Meal, for family use,	100lbs.	1 94	2 00
Chop Rye,	"	—	2 25
Eggs,	dozen.	18	25
Fish, Shad, No. 1, Susquehanna,	barrel.	—	—
No. 2,	"	—	—
Herrings, salted, No. 1,	"	3 50	—
Mackerel, No. 1, ——— No. 2	"	9 50	10 50
No. 3,	"	—	6 75
Cod, salted,	cwt.	—	—
Lard,	pound.	16	17

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,	par
Branch at Baltimore,	do
Other Branches,	do
MARYLAND.	
Banks in Baltimore,	par
Hagerstown,	¼a
Frederick,	do
Westminster,	do
Farmers' Bank of Mary'd,	do
Do. payable at Easton,	do
Salisbury, 5 per ct. dis.	
Cumberland,	1
Millington,	do
DISTRICT.	
Washington, Georgetown, Alexandria, } Banks,	½.
PENNSYLVANIA.	
Philadelphia,	¼a
Chambersburg,	¾a
Gettysburg	do
Pittsburg,	2a2½
York,	¼a
Other Pennsylvania Bks.	1¼a2
Delaware [under $5]	3a4
Do. [over 5]	¼a½
Michigan Banks,	5a
Canadian do.	5a
VIRGINIA.	
Farmers Bank of Virginia	¼a½
Bank of Virginia,	do
Branch at Fredericksburg	do
Petersburg,	do
Norfolk,	do
Winchester,	do
Lynchburg,	do
Danville,	do
Bank of the Valley,	do
Branch at Romney,	1
Do. Charlestown,	do
Do. Leesburg,	do
Wheeling Banks,	2a2½
Ohio Banks, generally	3a3½
New Jersey Banks gen.	1¼a2
New York City,	¼a
New York State,	2½a3
Massachusetts,	2a2½
Connecticut,	2a2½
New Hampshire,	2a2½
Maine,	2a2½
Rhode Island,	2a2½
North Carolina,	3a3½
South Carolina,	3a3½
Georgia,	3½a4
New Orleans	6

MORUS MULTICAULIS, FRUIT TREES, AND GREEN HOUSE PLANTS.

THE subscriber, as agent for the Messrs. Prince and Sons of Flushing, N. Y. will receive orders for any of the above articles, which will be furnished in good condition and with despatch. The Morus Multicaulis, (or Chinese Mulberry,) will be furnished as follows—from 2 to 3 feet high at $30 per 100, 3 to 4 feet at $35 per 100, Cuttings at $50 per 1000—The genuineness of the variety is guaranteed by Messrs. Prince and Sons—Also, the White Florence Mulberry Trees, which differ from the common sort by having entire leaves—price, 3 to 4 feet high, $15 per 100.

Every variety of Fruit and Ornamental Trees, Shrubbery, Flower Roots and Green House Plants, Field, Garden, and Flower Seeds, will be furnished on very favorable terms, and of superior quality.

Orders for the Morus Multicaulis, and indeed for all other trees and shrubbery, should be handed in by the 15th of October, and the articles will be sent according to directions, so as to reach their destination by the 1st to 10th November. Every purchaser will receive Prince & Sons' printed bills with their signature and guarantee.—Orders from a distance or from persons unknown to the subscriber, should be accompanied with respectable references in Baltimore or New York, or the money.

GIDEON B. SMITH,
At the Turf Register office, corner of
sep 27 North and Fayette st. Baltimore

NEWLY IMPORTED SPANISH JACKS

OF THE FIRST QUALITY.

I am about to receive direct from Spain six JACKS, selected by a competent judge acting under the direction of the American Consul at Gibraltar, whose instructions to said Agent were to "purchase only *proved Jacks*, the best that can be procured without regard to price." The Spanish certificates that accompany them describe them minutely, representing them all as either white or grey, from four to eight years old, and from 52 to 56 inches high. They are also certified to be "able to cover mares, and of the most approved breed for that purpose in the kingdom." If on coming to hand they prove, as is fully expected, true to their respective descriptions, they will be sold for from $1200 to $1500 each. They will be ready for delivery here about the middle of November.

I have also on sale two imported MALTESE JACKS, each 13½ hands high, 10 and 11 years old, and first rate breeders. Price $1000 each. Also several smaller Jacks at lower prices.

The subscriber is also agent for the sale of "GREEN'S PATENT STRAW CUTTER," unquestionably the best implement of the kind yet invented. Price at the store $32, and it costs about $1 to pack and ship it. Address

I. I. HITCHCOCK,
Agricultural Agent, No. 5 South Fifth st Philadelphia.
Philadelphia, Oct. 13th, 1836. oc 25

FARMER'S REPOSITORY

No. 36 W. Pratt-street, Baltimore, Jan. 25.

THE proprietor avails himself again of the commencement of a New Year, to express his grateful thanks to his numerous friends and customers for their kind and liberal support of his Agricultural Establishment, and is happy to say that his ceaseless exertions to accommodate the public, have not been without a corresponding encouragement from them, and with his present Improvements and Machinery, he is able to manufacture his Agricultural Implements much better than formerly, and with greater facility, and hopes to merit continued patronage. He now presents to the public an article new in its construction, for grinding corn and cob for feeding horses and stock. To those who approve this mode of feeding, this machine is worthy their attention. Also, Corn Shellers to be worked by hand or horse-power. He has a variety of Straw Cutters; but his own patented Cylindrical Straw Cutter is not surpassed by any other implement of the kind in existence; he has recently made some improvements in their construction, which adds to their cost, and for which he has been obliged to add a trifling advance on the price of the small size:—his prices for them being as follows, viz:

11 inch Revolving bottoms $30, with extra pair of knives,				$33
11 " Permanent Bottom 28,	do	do	do	31
13 " " " 43,	do	do	do	48
13 " Revolving Bottom 45,	do	do	do	50
15 " " " 50,	do	do	do	56
20 " Large size fitted for horse-power 80,	do	do	do	90

His variety of ploughs embraces almost every description and size that are worthy of notice, from a small seed Plough to the large rail road Plough—Gideon Davis' Improved Ploughs in all their variety, with cast and wrought shares; these castings are now made on his own premises, of the best stock and with special care; a supply of them always on hand to sell separate from the ploughs when required. Ox Scrapers for levelling hills, &c.; common and patent Wheat Fans; Fox & Borland's spring concave Thrashing Machines, large and small size, and portable horse powers for the latter; also one of Z. Booth's 2 horse Thrashing Machines and stationary horse power for the same; Brown's vertical patent Wool Spinners, and Watson's patent Washing Machine, both very simple and useful machines for families; Harrows; double and single corn and tobacco Cultivators; superior grain Cradles; and a great variety of other farming implements of a prime quality; and all on reasonable terms, at wholesale and retail.

Likewise in store—Orchard Grass, Timothy, and Herds Grass seed of superior quality.

JONATHAN S. EASTMAN.

FOR SALE,

A half Durham and half Devon Bull, — years old of fine model and size. As his owner has no use for him he would be sold a bargain. Apply to the editor. no 15